

IN THE CLAIMS:

Kindly amend claims 2, 4 and 19 as shown in the following listing of claims, which replaces all previous versions and listings of claims in this application.

1. (previously presented) A method for manufacturing a semiconductor device, comprising the steps of:

forming a first silicon oxide film having a first thickness on a silicon substrate;

nitriding the first silicon oxide film so that silicon oxynitride forms at an interface between the silicon substrate and the first silicon oxide film;

removing the first silicon oxide film from a part of the silicon substrate using a chemical containing at least an ammonia-hydrogen peroxide solution so that the silicon oxynitride formed at the interface between the part of the silicon substrate and the first silicon oxide film is completely removed; and

forming a second silicon oxide film in at least a portion of the part of the silicon substrate from which the first silicon oxide film and the silicon oxynitride have been removed, the second silicon oxide film having a second thickness different from the first thickness.

2. (currently amended) A method for manufacturing a semiconductor device according to claim 1; wherein the nitriding step includes the step of using ~~an inert gas containing at least~~ an ammonia gas.

3. (previously presented) A method for manufacturing a semiconductor device, comprising the steps of:
forming a first silicon oxide film having a first thickness on a silicon substrate;

nitriding the first silicon oxide film so that silicon oxynitride forms at an interface between the silicon substrate and the first silicon oxide film;

removing the first silicon oxide film from a part of the silicon substrate;

washing the part of the silicon substrate from which the first silicon oxide film has been removed using a chemical containing at least an ammonia-hydrogen peroxide solution so that the silicon oxynitride formed at the interface between the part of the silicon substrate and the first silicon oxide film is completely removed; and

forming a second silicon gate oxide film in at least a portion of the part of the silicon substrate from which the first silicon oxide film and the silicon oxynitride are removed, the second silicon oxide film having a second thickness different from the first thickness.

4. (currently amended) A method for manufacturing a semiconductor device according to claim 3; wherein the nitriding step includes the step of using ~~an inert gas containing at least~~ an ammonia gas.

5. - 14. (canceled).

15. (previously presented) A method for manufacturing a semiconductor device, comprising the steps of:

forming a first silicon oxide film on a semiconductor substrate;

subjecting the first silicon oxide film to an atmosphere containing at least an ammonia gas so that silicon oxynitride forms at an interface between the semiconductor substrate and the first silicon oxide film;

completely removing the first silicon oxide film and the corresponding silicon oxynitride from a portion of the semiconductor substrate; and

forming a second silicon oxide film on the portion of the semiconductor substrate from which the first silicon oxide film and the silicon oxynitride have been completely removed.

16. (previously presented) A method for manufacturing a semiconductor device according to claim 15; wherein the removing step comprises a first step of completely

removing the first silicon oxide film from the portion of the semiconductor substrate, and a second step of washing the portion of the semiconductor substrate from which the first silicon oxide film has been removed using a chemical containing at least an ammonia-hydrogen peroxide solution to completely remove the silicon oxynitride formed at the interface between the portion of the semiconductor substrate and the first silicon oxide film.

17. (previously presented) A method for manufacturing a semiconductor device according to claim 16; wherein the first step comprises the step of using an hydrofluoric acid to completely remove the first silicon oxide film from the portion of the semiconductor substrate.

18. (previously presented) A method for manufacturing a semiconductor device according to claim 15; wherein the removing step comprises the step of removing the first silicon oxide film from the portion of the semiconductor substrate using a chemical containing at least an ammonia-hydrogen peroxide solution so that the silicon oxynitride formed at the interface between the portion of the semiconductor substrate and the first silicon oxide film is completely removed.

19. (currently amended) A method for manufacturing a semiconductor device according to claim 15; wherein the nitriding step includes the step of using ~~an inert gas containing at least~~ an ammonia gas.

20. (previously presented) A method for manufacturing a semiconductor device according to claim 15; wherein the semiconductor device comprises a MOS transistor; and wherein the first silicon oxide film comprises a gate oxide film of the MOS transistor.